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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/700,282	11/03/2003	Gordon Jeffrey Hugghins	TIR- 2747	4499	
75	590 02/08/2005		EXAM	EXAMINER	
MICHAEL E. MARTIN			LU, ЛРING		
THE TRANE COMPANY, PATENT DEPT. 12-1 3600 PAMMEL CREEK ROAD			ART UNIT	PAPER NUMBER	
LA CROSSE,	<del>_</del>		3749	3749	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			1
	Application No.	Applicant(s)	
Office Action Summer	10/700,282	HUGGHINS ET AL.	,
Office Action Summary	Examiner	Art Unit	
	Jiping Lu	3749	
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REI THE MAILING DATE OF THIS COMMUNICATION  Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a  If NO period for reply is specified above, the maximum statutory peri  Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply within the statutory minimum of thi iod will apply and will expire SIX (6) MOstute, cause the application to become A	reply be timely filed  ty (30) days will be considered timely.  NTHS from the mailing date of this communication  BANDONED (35 U.S.C. § 133).	n.
Status			
1) Responsive to communication(s) filed on	·		
2a) This action is <b>FINAL</b> . 2b) T	his action is non-final.		
3) Since this application is in condition for allow closed in accordance with the practice under	` o / / .	•	<b>;</b>
Disposition of Claims			
4) ☐ Claim(s) 1-27 is/are pending in the applicating 4a) Of the above claim(s) 1-3 is/are withdraw 5) ☐ Claim(s) 4-19 is/are allowed.  6) ☐ Claim(s) is/are rejected.  7) ☐ Claim(s) 20-24 is/are objected to.  8) ☐ Claim(s) are subject to restriction and	wn from consideration.		
Application Papers			
9) The specification is objected to by the Exam	iner.		
10) The drawing(s) filed on is/are: a) a	accepted or b) objected to	by the Examiner.	
Applicant may not request that any objection to t	he drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the corr	rection is required if the drawing	(s) is objected to. See 37 CFR 1.121(c	i).
11)☐ The oath or declaration is objected to by the	Examiner. Note the attache	d Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documed 2. Certified copies of the priority documed 3. Copies of the certified copies of the papplication from the International Burn * See the attached detailed Office action for a line of the papplication from the International Burn * See the attached detailed Office action for a line of the papplication from the International Burn * See the attached detailed Office action for a line of the papplication fo	ents have been received. ents have been received in A priority documents have beer eau (PCT Rule 17.2(a)).	Application No  received in this National Stage	
Attachment(s)	., <b>(</b>		•
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date <u>02062004</u>.</li> </ol>	Paper No	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152) 	

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## **DETAILED ACTION**

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## Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-3 are, drawn to a space heating system, classified in class 237, subclass 19.

II. Claims 4-27 are, drawn to a method for controlling heating operation, classified in class 126, subclass 116A.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the method as claimed in claim 4 can be carried out by other apparatus, e.g. tobacco dryers. No multi-stage furnace is required in claim 4. the apparatus claim 1 can be used to perform other process, e.g. green house ventilation.
- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

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5. During a telephone conversation with William O'Driscoll on 11/9/2004 a provisional election was made with traverse to prosecute the invention of Group II, claims 4-27. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-3 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### Claim Objections

7. Claims 20-27 are objected to because of the following informalities: Are claims 20-27 apparatus claims or method claims? Claims 20-27, line 1, the claimed "invention" shows no antecedent basis. It is suggested that the applicant to cancel "invention" and insert "method". If they are method claims, there should be a series of active steps recited. If claims 20-27 are apparatus claims, then, they should be depended from a preceding apparatus claim 1 or 2 or 3.

Appropriate correction is required.

### Allowable Subject Matter

8. Claims 4-19 are allowed.

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Conclusion

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9. This application is in condition for allowance except for the following formal matters:

(1) non elected claims 1-3 which withdrawn from consideration;

(2) objected claims 20-27, see above paragraph7

Prosecution on the merits is closed in accordance with the practice under *Ex parte*Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 571 272-4877. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary Examiner
Art Unit 3749